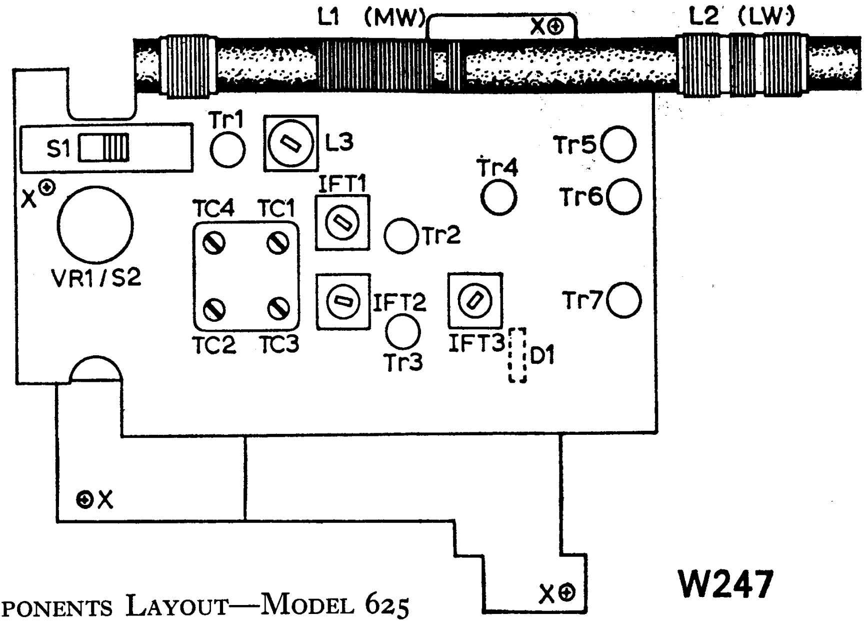
ALBA Model 625

General Description: A portable transistor radio for the reception of Long and Medium Waves.

Waveband Coverage: L.W.: 1,200–2000 m; M.W.: 187–561 m.

Batteries: 6 volts (4 × 1·5 volts, LPU2 or equivalent). Quiescent current 16 mA.

Loudspeaker: 4 ohms impedance.



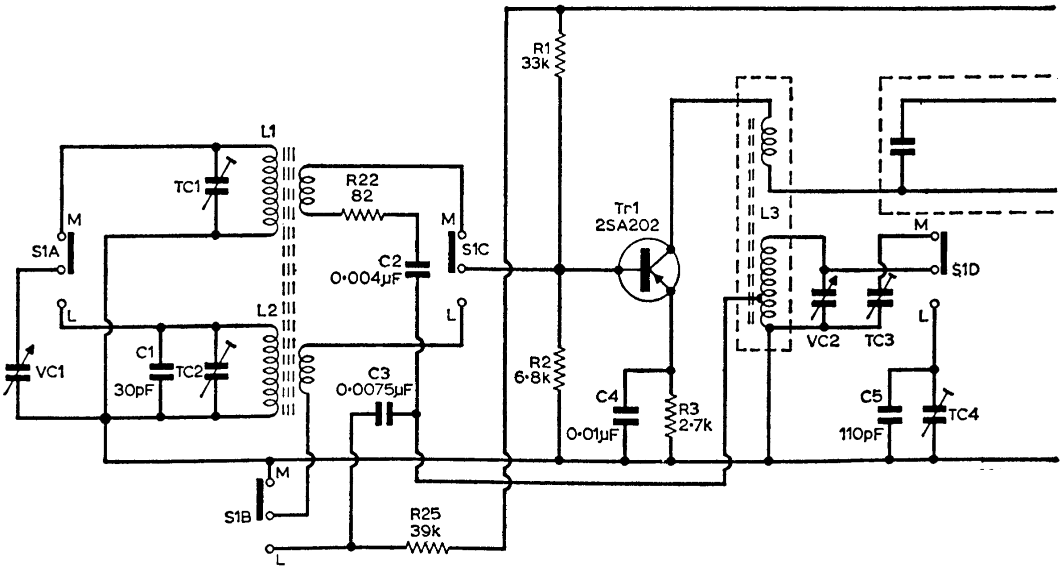
W247

(W247) Main Components Layout—Model 625

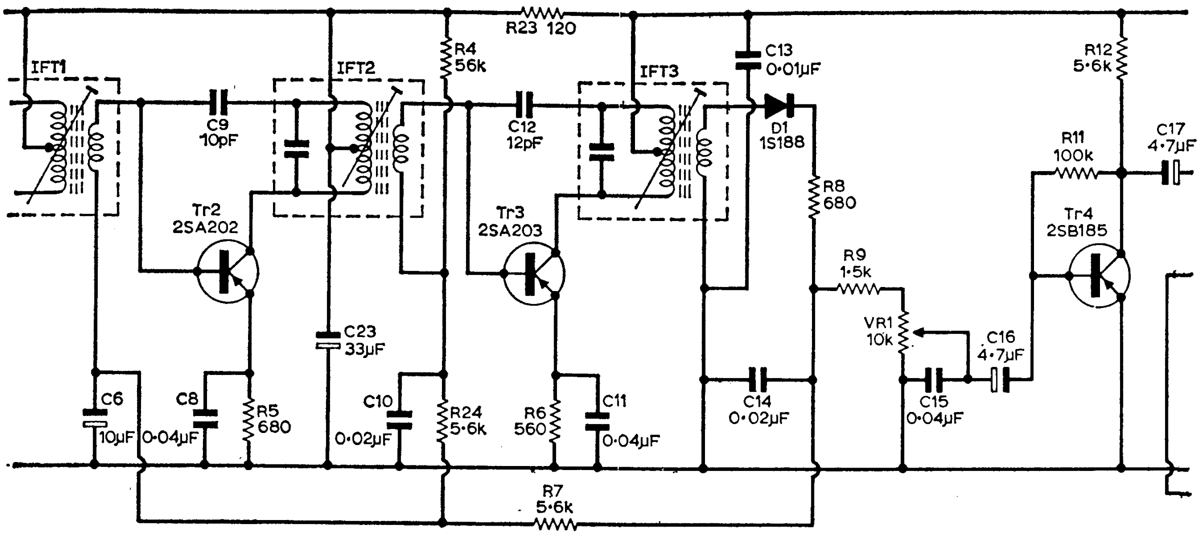
TRANSISTOR VOLTAGES

	Collector	*Base*	*Emitter*
Tr1	4·2V*	0·6V	0·5V
Tr2	4·2V, 400µA	0·35V	0·25V
Tr3	4·3V, 850µA	0·55V	0·5V
Tr4	3·75V, 600µA	0·15V	——
Tr5	2·7V, 4·2µA	0·35V	0·25V
Tr6	——	2·7V	2·9V
Tr7	6V	3·3V	3·1V

* Tr1 collector current 400µA (LW), 250µA (MW)



(W246a) Circuit Diagram—Model 625 (*Part*)



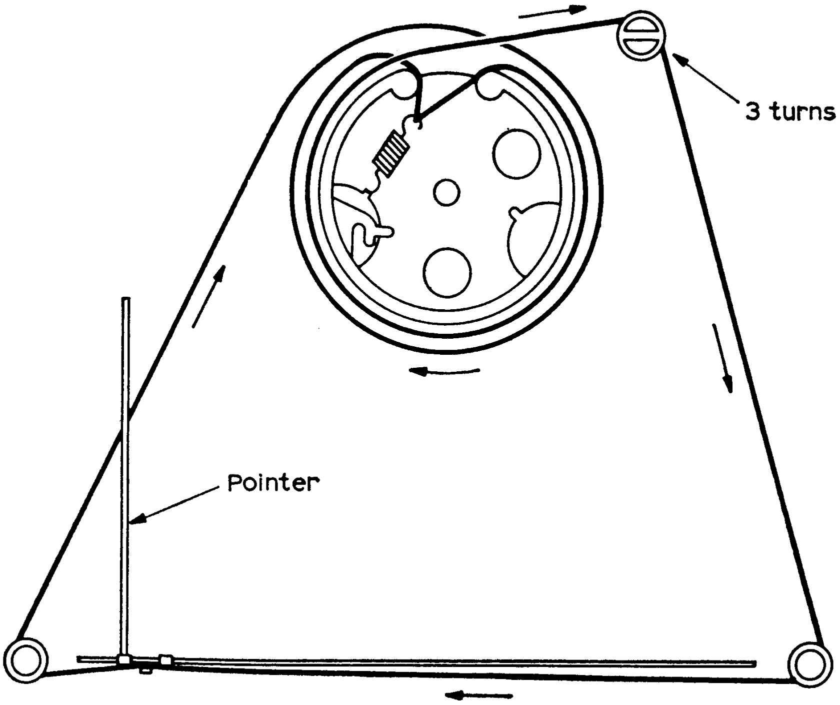
(W246b) Circuit Diagram—Model 625 (*Part*)

Dismantling

General: On unclipping and folding up the case back, access is provided to the batteries and component side of the printed circuit board.

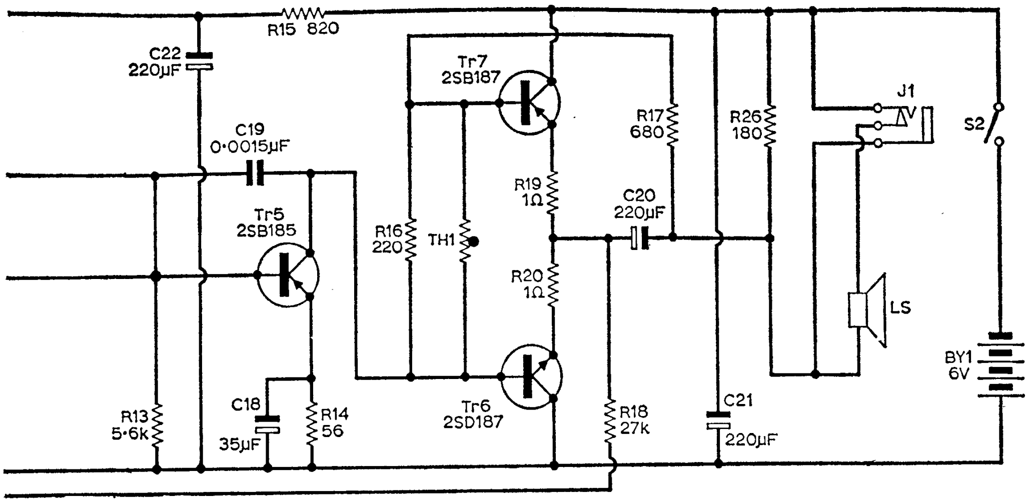
Access to Components: For further dismantling, in order to obtain access to the tin dip side of the printed circuit board or to the drive cord system, proceed as follows:

Pull off the two front control knobs. Remove the batteries and battery tube. Remove the four Phillips-head screws marked "X" on the top layout diagram and the complete circuit board assembly may be withdrawn.



(W248) Drive Cord—Model 625

W248



(W246c) Circuit Diagram—Model 625 (*Continued*)

Alignment

General: Access to all cores, trimmers and coils is obtained on opening up the case back. For all alignment steps, test signals should be injected via a coupling loop placed near to, and coaxial with, the ferrite rod aerial assembly.

As circuits come into alignment, the output from the signal generator should be progressively reduced and maintained at as low a level as reasonable to avoid misleading results due to A.G.C. action.

Output is measured on an output meter (4Ω) connected across the loudspeaker, or plugged into the earphone socket.

I.F. Circuits: Switch receiver to M.W., tune to extreme low frequency end of the band and turn volume control to maximum. Inject test signal of 470kHz and trim the cores of IFT3, IFT2 and IFT1, in that sequence, for maximum output. Repeat with reduced signal input.

M.W. Circuits: Tune receiver to extreme low frequency end of the band, inject test signal of 510kHz and trim oscillator coil L3 for maximum output. Retune receiver to extreme high frequency end of the band, inject signal of 1,640kHz and adjust oscillator trimmer TC3 for maximum output.

Tune receiver to 500m mark, inject test signal of 600kHz and adjust M.W. aerial coil L1, by sliding it along ferrite rod, for maximum output. Retune receiver to 200m mark, inject test signal of 1,500kHz and adjust M.W. aerial trimmer TC1 for maximum output. Repeat all the above steps.

L.W. Circuits: Switch receiver to L.W. Tune receiver to the extreme high frequency end of the band, inject test signal of 265kHz and adjust oscillator trimmer TC4 for maximum output.

Tune receiver to the 180m mark, inject test signal of 166·6kHz and adjust L.W. aerial coil L2, by sliding it along ferrite rod, for maximum output. Retune receiver to the 120m mark, inject test signal of 250kHz and adjust aerial trimmer TC2 for maximum output. Repeat all the above steps.